

# SEQUENCE LISTING

<110> Moyer, James W.  
Parks, Elizabeth

<120> IDENTIFICATION OF POINSETTIA CULTIVARS

<130> 5051.445

<150> US 60/220,854

<151> 2000-07-26

<160> 54

<170> PatentIn version 3.1

<210> 1

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<212> DNA

<213> Euphorbia pulcherrima

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<222> (24)..(24)

<223> "n" represents any nucleotide.

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<222> (195)..(195)

<223> "n" represents any nucleotide.

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ataacttctg gcagccatgt actcagcttc agctgtactt agagccatag aagtttattt 120
ctgtgtgtac catgtgtcta gacaattacc aaggaaatga catcctctag tgggtgtttt 180
cctttctaac ttgtntcttc cataattagc atttgtgtat gccctcagag tgaaatttcc 240
atttcttga taccataaac ctgcatcaat agttcctagc aaataccata acaacagcta 300
agtgagattc tctggggtta gcttgatatc taccataata acatacaaca tattgaattt 360
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<211> 198

<212> DNA

<213> *Euphorbia pulcherrima*

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<222> (35)..(35)

<223> "n" represents any nucleotide.

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<222> (45)..(45)

<223> "n" represents any nucleotide.

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<222> (48)..(48)

<223> "n" represents any nucleotide.

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<222> (154)..(154)

<223> "n" represents any nucleotide.

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 <223> "n" represents any nucleotide.

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 tagagctttg ttgcaggatt tgactgagag gaattgtgtc atggagagaa gtctcagtgct 120  
 gagcccgatt gtgtttagg agaagaaatt gganagaagn cgttgggggc aagtatggag 180  
 ttgagaatcc cacatcta 198

<210> 3  
 <211> 182  
 <212> DNA

<213> Euphorbia pulcherrima

<400> 3  
 agttagaaaa gcaaatctca gtgcagggtg tactattgca aatgtagag ctttgttgca 60  
 ggatttgaca gagaggaatt gtatcatgga gagaagttcg agtgcgagcc cgattgtgtt 120  
 gtaggagaag aaattggaag aagacgttgg gggcaagtgt ggagttgaga atcccacatg 180  
 ta 182

<210> 4  
 <211> 161  
 <212> DNA

<213> Euphorbia pulcherrima

<400> 4  
 tgctccaag gtgtttctcc ttttgataga gaaatcttac caactatgga aaactgacat 60  
 gatttcagcc tctcttcata aagattttga ggaatctgaa ttgctttgta tctcccactt 120  
 gcgtcaatga tttgtgagtt cagggttgga gcagatatct a 161

<210> 5  
 <211> 103  
 <212> DNA

<213> Euphorbia pulcherrima

<400> 5  
cgacgatggc aatgatgaca attcttgcct ggaaccagaa atgataattg atactcccta 60  
tatagggaga atgttgaaaa ttagattttg aagttgttat tta 103

<210> 6

<211> 371

<212> DNA

<213> *Euphorbia pulcherrima*

<220>

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<222> (81)..(81)

<223> "n" represents any nucleotide.

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ctcttccaag tatatatttc tctagcatct cccatgcata agaactgttg gagtgatat 180  
gtatgagaaa gaaatgtata ataccaacct ctccatttg ctttgttcta ctgctttcca 240  
agtgtctggt ttaggtgtat tacaaggccc tatagtagcc tgcagtcatt catggaacta 300  
acaaactcag tatctaagcc cggggtgaaa agatactcac aatctcacat ttccgatcaa 360  
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<210> 7

<211> 247

<212> DNA

<213> *Euphorbia pulcherrima*

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<222> (22)..(22)

<223> "n" represents any nucleotide.

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 <222> (175)..(175)  
 <223> "n" represents any nucleotide.

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 gatgtgttc gaagaaatat ggggtaacag ngatttcttt gccctggacc ttggnittgaa 180  
 gagcatcaaa ctggcggtga acactaagaa tctcatagaa ctcccttgac taagtcagga 240  
 tatgtggg 247

<210> 8  
 <211> 221  
 <212> DNA  
 <213> Euphorbia pulcherrima

<400> 8  
 agctcttcat tgcttcatca taggttatcg gtttatcatc ctctatgata tatagttccc 60  
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 cattgattgt gtttcaacag gttgttcatt ggatcaaacc ttcttgtgta tctagaatgg 180  
 ggccaactag ttgattatct gttttatatt ctggaagctc c 221

<210> 9  
 <211> 176  
 <212> DNA  
 <213> Euphorbia pulcherrima

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 gatggttttag acagggtttt gaccagcagc ctggagtttg gagattgttg gcctcatcag 120

aaattagttt tcattggagtt gggagatttg aaggtaattc aaggaagttt tctgca 176

<210> 10

<211> 73

<212> DNA

<213> Euphorbia pulcherrima

<220>

<221> misc\_feature

<222> (54)..(54)

<223> "n" represents any nucleotide.

<400> 10  
ccggataaaa gcactacaat caggtagatg actcgggtcg gatacgtagt gcantactga 60  
gtcagactaa cga 73

<210> 11

<211> 75

<212> DNA

<213> Euphorbia pulcherrima

<400> 11  
gtttatcttc aagtctaaca agaccagtt tttcagattc ctttctctcaa tttctcgttc 60  
agttataaaa gctaa 75

<210> 12

<211> 64

<212> DNA

<213> Euphorbia pulcherrima

<220>

<221> misc\_feature

<222> (52)..(52)

<223> "n" represents any nucleotide.

<400> 12  
gaatgcctat tacatcggaa aacaaaaaaa caaagataaa tgctagagac antataatca 60  
tccc 64

<210> 13

<211> 59

<212> DNA

<213> Euphorbia pulcherrima

<400> 13  
gtctttctag ttttactgat ttctgttgta ctctattag atatatattg tatatctga 59

<210> 14

<211> 49

<212> DNA

<213> Euphorbia pulcherrima

<400> 14  
ttgaaggcag gaaaatatat cctattctga aaggatttac aatctgcgg 49

<210> 15

<211> 216

<212> DNA

<213> Euphorbia pulcherrima

<400> 15  
acttctctcc ccacacaatg tgtagtgcag ctagtgccga tgacagtga aagaccagaa 60  
tcacatagag agcgatcgta tgaaaaggta ttgaattagg gatttgatga aagggttaaga 120  
tagaaaagga gttggtgta gcgagttgtt tctctgccc tcacaataat acttttatca 180  
atctttcagt aacaatttgt ccatgtactt ttggac 216

<210> 16

<211> 120

<212> DNA

<213> Euphorbia pulcherrima

<400> 16

tgtgctcttg ttccttgat caaataagga aacatggcct taggtaagt tagtcataac 60  
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<210> 17

<211> 120

<212> DNA

<213> Euphorbia pulcherrima

<400> 17  
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<210> 18

<211> 118

<212> DNA

<213> Euphorbia pulcherrima

<400> 18  
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<210> 19

<211> 117

<212> DNA

<213> Euphorbia pulcherrima

<400> 19  
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 agtatgaaaa tagaaaataa aatcataagt aacagcacaa ttaccagctg gactctc 117

<210> 20

<211> 109

<212> DNA

<213> Euphorbia pulcherrima

<400> 20  
 gaatgtgctc ttgggtcctt agggatctaa ataaggaaac atggcttggt atagtaataa 60



tacttttggc tcataaactc tagtcctatg ctacaggtgt cagatgata 109

<210> 21

<211> 114

<212> DNA

<213> Euphorbia pulcherrima

<400> 21  
gatgtgctct tggtcctgga tctaataaaa catgccttgt attagtaaaa ataccctttt 60

ggctatgaac cctgagtccc ctatggcttg aaaaagggtg tgcaggattg gtat 114

<210> 22

<211> 119

<212> DNA

<213> Euphorbia pulcherrima

<400> 22  
tttctctctg attacattac tatgtaaaga cctaaatgaa tgagtcttct tcgcaaggac 60

caaatcgaga tattttaact aatttttct ctgaaatat tttatctaga tgaaattt 119

<210> 23

<211> 116

<212> DNA

<213> Euphorbia pulcherrima

<400> 23  
gctttcttac attcttgggg acaagaatgc tttgaagggg aggggtattgt caggaggaag 60

taatataatc tgattgttat ttatgtttatt tgctttgggt aaataagttg actatg 116

<210> 24

<211> 336

<212> DNA

<213> Euphorbia pulcherrima

<220>

<221> misc\_feature

<222> (333)..(333)

<223> "n" represents any nucleotide.

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ttgctttatc tactatagaa gtagaatata tggcagctag aagttgtgta gctcaacttc 180  
tttggatcaa gcaacaacta gaagattatg gagtctaadc cgggtgtgtg gatgtaatgt 240  
gtgattacaa aagtgccatt gatgtgtcaa acaatccagt attccatagg aggataaaac 300  
atgtcaacat aaggcatcgt gaagagaaga aanttg 336

<210> 25

<211> 232

<212> DNA

<213> *Euphorbia pulcherrima*

<220>

<221> misc\_feature

<222> (6)..(6)

<223> "n" represents any nucleotide.

<220>

<221> misc\_feature

<222> (26)..(26)

<223> "n" represents any nucleotide.

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ttcagttctt gagcacatgt tctgaaaaaa tatcaaatct ctacattgtt ttcaagggtca 120  
acaaatgacc ggtaaggctc gggttggtct agaccgggca catcaatttg gggacaattt 180  
tgaatccatt ttatcctact tttttgtatt ggcagtaagg attaggattc tc 232

<210> 26

<211> 167

<212> DNA  
 <213> Euphorbia pulcherrima

<220>  
 <221> misc\_feature  
 <222> (73)..(73)

<223> "n" represents any nucleotide.

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 aaccacccca tgnatatat ggtattcatc actcgaatat ttatgtaagt catccatctc 120  
 attcagggtt tgattcgggc tgatcatctt ccgggtttctc tagctaa 167

<210> 27  
 <211> 102  
 <212> DNA  
 <213> Euphorbia pulcherrima

<400> 27  
 ttgtcaggag tactgtccat gtaaatgtga gacttcgcac tatcattgca agcaatagca 60  
 atagaagaaa catcattttg cagcttacta atacaccac tc 102

<210> 28  
 <211> 308  
 <212> DNA  
 <213> Euphorbia pulcherrima

<400> 28  
 gcctagaaag gttttctagt caacatactc acgtagctca cttttaccct aacttttgcc 60  
 tagaacgtcc tttttgaatt ttcagtctag cgggctatct tgcaccctaa cttttgctgt 120  
 aatgggttgt agaataccaa atagcgggat atgccctaatt tttgcctaag cagtagagga 180  
 cactcatcg ggtgatttat ttgattatt tttgtgtgc cgcttttctg gatttgattc 240  
 ttttagatta gatatgataa tgcttcaatc gatcctgatt gatagggttt gtgaattggt 300  
 acgcagcc 308

<210> 29

<211> 137  
 <212> DNA  
 <213> Euphorbia pulcherrima

<400> 29  
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 catcctcgtt gttgctc 137

<210> 30  
 <211> 135  
 <212> DNA  
 <213> Euphorbia pulcherrima

<400> 30  
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 tagactaaaa agagcaaggc tgatgcaaaa gtcagaataa gtctgctgga ttgaaatcga 120  
 aaggatatcta ggcaa 135

<210> 31  
 <211> 139  
 <212> DNA  
 <213> Euphorbia pulcherrima

<220>  
 <221> misc\_feature  
 <222> (128)..(128)  
 <223> "n" represents any nucleotide.

<400> 31  
 ggcccttctt cagccatgat atctaaatat acgagtcttg tgtgtacgcc attgcatttc 60  
 tagcccttct ccagggggcg ttctcatctt gtccatgcc taatacaatt tcatatattc 120  
 tctctcnag taagcaacc 139

<210> 32

<211> 281  
 <212> DNA  
 <213> *Euphorbia pulcherrima*

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 agaaaaagcgg cacataaaaag tatataaaaa aatcacccga cgagtagtct tctactgctc 120  
 agggcaaaaat taggggtgat cctgttgttt ggtaaatctgt aaaccattca ggaataatgtt 180  
 aggggtgcaag aataacccgc tagactgaaa atctgaaaag gatgggtctag gcaaaattta 240  
 gggtaaaagt gagtacaat agtgtgttgg cttgaaaact t 281

<210> 33  
 <211> 211  
 <212> DNA  
 <213> *Euphorbia pulcherrima*

<400> 33  
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 gttttcacta ttccggtcatt tatgttgaat aaatcgctcc tagtcattcc tggcttccta 120  
 ggaacccag caggaattat cacaagatcc attcctgtaa gagcatcgtc tagttgctgc 180  
 tggcccaaga aaccacgcac ctgaaaatca t 211

<210> 34  
 <211> 320  
 <212> DNA  
 <213> *Euphorbia pulcherrima*

<220>  
 <221> misc\_feature  
 <222> (127)..(127)  
 <223> "n" represents any nucleotide.

<220>  
 <221> misc\_feature  
 <222> (136)..(136)

<223> "n" represents any nucleotide.

<220>

<221> misc\_feature

<222> (142)..(142)

<223> "n" represents any nucleotide.

<220>

<221> misc\_feature

<222> (148)..(148)

<223> "n" represents any nucleotide.

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<221> misc\_feature

<222> (192)..(192)

<223> "n" represents any nucleotide.

<220>

<221> misc\_feature

<222> (213)..(213)

<223> "n" represents any nucleotide.

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tgcaacaaaag tcaactgtac tagagattct cgtcccgaag tgccctcaag atgggatcgt 120  
tttcttnatc tatgtngtac tngtcgtngt cgtcatcatc cagggtcatcc agtattgatt 180  
gggtgatcct tntgcgagac tttcttctat gcnttcttgg gctccaaacg aggttcagct 240  
tgctgtactc ccataatcacc cactttgaac ctgcagagta gcataacgaa caagaaaaatg 300  
aatgatagta gaataaat 320

<210> 35

<211> 272

<212> DNA

<213> Euphorbia pulcherrima

<400> 35  
tatgggtattt cttttctggg tgtaattgat ttgcaacttg agtcaaacag gttctatcaa 60  
ctgatttttc tagttttcgg cgcttactgc aacctggaa aggatgttca ctgttttttc 120  
cttcgttttc caggtcagca atacgacgag taatttcctc ggtatcatat atggattcca 180  
gcttgaatc ttttatgcat tgaaatcagg ctttacgagc agctagtctt ctctccctgg 240  
ccttctcctg cagatgaaat caggagttaa at 272

<210> 36

<211> 195

<212> DNA

<213> Euphorbia pulcherrima

<400> 36  
cagattattt gactataatt agtttggctt ctatgggtgc tgcactaaat gatcatcgaa 60  
acagccaatc ggttcacgag tttgtcatga gaaaaggctg gttcatggaa tatattgtca 120  
ttgggaatgc aactgtggac atgtatgcta aaattggagc cacagatacg gcccgtagcag 180  
tatttgaaag cctac 195

<210> 37

<211> 171

<212> DNA

<213> Euphorbia pulcherrima

<400> 37  
tttcaaaagt tgaaaagaat atgtcataag ccttacacta gtaaatggaa ctatagtccg 60  
tgccccctac atcaaaagat caatgataaa gaagaacaaa acactccaaa gagcaattct 120  
tctcaaaagg tgctgagctg gaatccatt ctaatcgtgg catccctccc c 171

<210> 38

<211> 120

<212> DNA

<213> Euphorbia pulcherrima

<400> 38

aatgtagca aagaacatta tcaacaaatg ccccaaaaaa caagtgaata tataatcacc 60  
actgaagcaa aaaaagtaag taaaaacaga agaaaagaca actaaatgta gattattaca 120

<210> 39

<211> 88

<212> DNA

<213> Euphorbia pulcherrima

<400> 39  
aacttttttc ttgtataat tatctcatat tttttgtgaa tattcttgtt tgaatagaac 60  
acactttata tatgaaaccc actttatc 88

<210> 40

<211> 67

<212> DNA

<213> Euphorbia pulcherrima

<400> 40  
atccttttca acaaggacat cgaatgaaaag tgatttataa atgtggatat gtaaactctag 60  
cttagtg 67

<210> 41

<211> 223

<212> DNA

<213> Euphorbia pulcherrima

<400> 41  
ccaggagtaa aatagccatt atgaaagtac cattgaacca tattgctaac atccttgccg 60  
accagggtccc aaaagtgttg ataaaaata ccagtaaagc cgtcaggacc cagcgcacta 120  
tcacccctta tcgagaagac tctatttcga atttcatcaa aagaaggctt cctaataaac 180  
tcattcattgt cgctgccegt caccggatta ggaactgtct gcc 223

<210> 42

<211> 165

<212> DNA

<213> Euphorbia pulcherrima



<400> 42  
 ctaactggat gcaagaaatg agcaggcacc gatgaactag caaataaagg tggcagcatc 60  
 agaaccacca tcgtaaccac cgtagaatac gccgcccgat gaaagcccct gcattctttt 120  
 caaatacaat ctatacttct tgcatacatga accctacgtt ttctc 165

<210> 43  
 <211> 106  
 <212> DNA  
 <213> Euphorbia pulcherrima

<400> 43  
 actaatcca tattagatgg gaattggatc gcttgacatg agagatttca aatgaacttt 60  
 atttccatcc ctagagccga gttcataaaa tctctcctaa acccat 106

<210> 44  
 <211> 67  
 <212> DNA  
 <213> Euphorbia pulcherrima

<220>  
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 <222> (51)..(51)  
 <223> "n" represents any nucleotide.

<400> 44  
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 ttttcgg 67

<210> 45  
 <211> 50  
 <212> DNA  
 <213> Euphorbia pulcherrima

<220>  
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<222> (23)..(23)

<223> "n" represents any nucleotide.

<220>

<221> misc\_feature

<222> (47)..(47)

<223> "n" represents any nucleotide.

<400> 45  
gttcgtatat gtaatatatc ctngtaaagt ttaattacag aaacatngca 50

<210> 46

<211> 64

<212> DNA

<213> Euphorbia pulcherrima

<400> 46  
cgtaccagcg gagacgatgg cctgaaattt gagcaccttc cgtgcatca gagtttctca 60  
gtta 64

<210> 47

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide Primer.

<400> 47  
gactgcgtag caattcaag 19

<210> 48

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer.

<400> 48  
gactgctac caattcaca

19

<210> 49

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer.

<400> 49  
gactgctac caattcagc

19

<210> 50

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer.

<400> 50  
gatgagtcct gagtaacac

19

<210> 51

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer.

<400> 51  
gatgagtcct gagtaacta

19

<210> 52

<211> 19

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Primer.

<400> 52  
gatgagtcct gagtaactc 19

<210> 53  
<211> 19  
<212> DNA  
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<220>  
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<400> 53  
gatgagtcct gagtaactg 19

<210> 54  
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<223> Synthetic Oligonucleotide Primer.  
<400> 54  
gatgagtcct gagtaactt 19